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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,929	01/24/2000	Richard A. Lodge	9-13528-77US	6470

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EXAMINER

TRAN, PABLO N

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/489,929

Applicant(s)

LODGE ET AL.

Examiner

Pablo N Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-18, 21-29, 33-38, 41-47 and 49-52 is/are rejected.
- 7) ☒ Claim(s) 10-12, 19, 20, 30-32, 39, 40, 48, 53 and 54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 13-18, 21-29, 33-38, 41-47, and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Akita et al.* (5,383,221) in view of *Ludwig* (6,765,889).

As per claims 1, 21, and 41, *Akita et al.* disclosed a method of controlling data traffic in a wireless communications network comprising a plurality of wireless terminals and base stations wherein the method of controlling data traffic having the steps of examining performance each wireless link to identify a poorly performing wireless link and temporarily interrupting the bi-directional data transmission over the poorly performing wireless link (col. 6/ln. 4-63).

Akita et al. do not specifically disclose that such method of controlling the data traffic is implement for the base station. However, *Ludwig* teaches such method of controlling the data traffic during temporarily interruption can be facilitated at the mobile station, base station, or at the network (col. 14/ln. 58-67). Since, both references disclosed such method of monitoring and temporarily interruption of the wireless

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communication link, therefore, it would have been obvious to one of ordinary skill in the art to provide such teaching of *Akita et al.* to the communication system of Ludwig in order to allow efficient handling of data transmission and effectively utilize system resources for a zone, cell, or a predetermined area within the network.

As per claims 2, 22, and 42, the modified system of *Akita et al.* disclosed monitoring one or more performance parameters related to each wireless link but do not specifically disclose comparing each monitoring performance parameters to a respective predetermined threshold. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of comparing the link quality against a threshold, well known, to the monitoring method of *Akita et al.*, to provide reliable and sensitive measurement in order in order to improve communication links but also to effectively utilize system resources.

As per claims 3-4, 9, 13-14, 17, 23-24, 29, 33-34, 37, 43-44, 47, 49, and 50-51, the modified system of *Akita et al.* do not specifically disclosed the performance parameters related to each wireless link are based on interference on the wireless link and comprises any one or more of a S/N ratio, a user data throughput rate, a C/I ratio, a BER ratio, suspend frames, or dropped frames. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such measurements of the performance parameters as stated above, well known, to the monitoring method of *Akita*

et al., to provide reliable and sensitive measurement in order to save power but also to effectively utilize system resources.

As per claims 5, 25, and 45, the modified system of *Akita et al.* do not explicitly disclosed an average, taken over a number of successive burst, of any one or more of the S/N ratio, the C/I ratio, the user data throughput rate, or the BER ratio. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of taking an average measurement of such performance parameter, well known, to the communication systems of *Akita et al.* to provide an utmost accurate measurement prior to disconnected the poorly performance wireless link.

As per claims 6 and 26, the modified system of *Akita et al.* disclosed suspending transmission of a data frame over the poorly performing wireless link (see *Akita et al.*, col. 6/ln. 4-63).

As per claims 7-8, 15-16, 27-28, and 35-36, the modified system of *Akita et al.* do not disclosed resuming transmission of the data frame after a delay period of random length. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of re-transmitting the drop frame(s), well known, to the communication systems of *Akita et al.* to provide a reliable communication system such that data transmission will be delivered to the user.

As per claims 18, 38, and 52, the modified system of *Akita et al.* do not disclosed dropping the communication links if a number of dropped frames exceed a threshold.

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However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art to provide such method of drop the communication link(s), well known, to the communication systems of *Akita et al.* to effectively utilize system resources.

As per claim 46, *Akita et al.* disclosed suspending transmission of a data frame over the poorly performing wireless link (see *Akita et al.*, col. 6/ln. 4-63).

Allowable Subject Matter

3. Claims 10-12, 19-20, 30-32, 39-40, 48, and 53-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 12/10/04 have been fully considered but they are not persuasive.

The Applicant's stated that "Akita et al. do not suggested monitoring each wireless link of the network". Accordingly, the claimed limitation recited, "examining performance of each wireless link to identify a poorly performing wireless link". In response to the Applicant, *Akita et al.* disclose such step of monitoring the performance of each wireless link that is in communication (col. 5/ln. 64-65).

The Applicant's stated that "Akita et al. do not suggested contemplated interruption of bi-directional transmission". In response to the Applicant, Akita et al. disclose such step of temporarily interruption bi-directional data transmission of the degrade communication link (col. 3/ln. 33-38).

The Applicant's stated that "the combination of Akita et al. and Ludwig is improper. In response to the Applicant, both references disclosed such method of monitoring and temporarily interruption of the wireless communication link, therefore the combination is proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:


(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

6. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

**PABLO N. TRAN
PRIMARY EXAMINER**

May 21, 2005


H02685